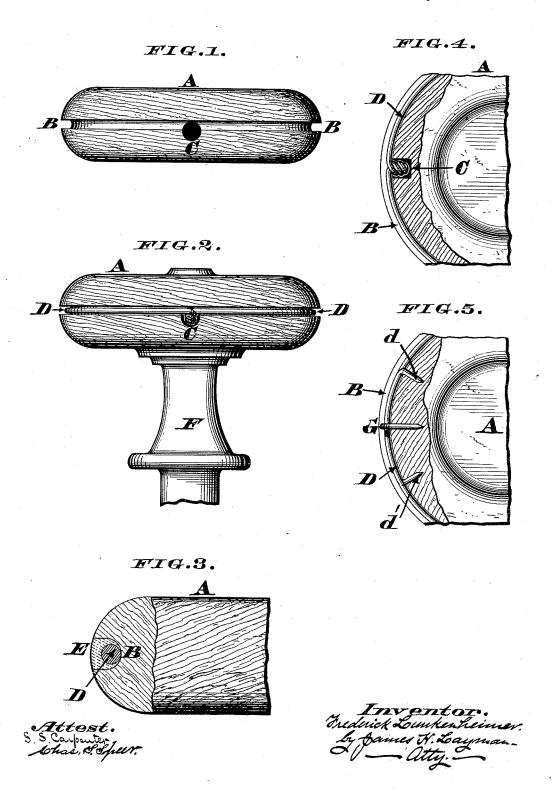
(No Model.)

F. LUNKENHEIMER.

NON CONDUCTING HAND WHEEL FOR COCKS, VALVES, AND OTHER STEAM FITTINGS.

No. 383,474.

Patented May 29, 1888.



UNITED STATES PATENT OFFICE.

FREDERICK LUNKENHEIMER, OF CINCINNATI, OHIO.

NON-CONDUCTING HAND-WHEEL FOR COCKS, VALVES, AND OTHER STEAM-FITTINGS.

SPECIFICATION forming part of Letters Patent No. 383,474, dated May 29, 1888.

Application filed January 24, 1888. Serial No. 261,793. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK LUNKEN-HEIMER, a citizen of the United States of America, residing at Cincinnati, in the county of 5 Hamilton and State of Ohio, have invented certain new and useful Improvements in Non-Conducting Hand-Wheels for Cocks, Valves, and other Steam-Fittings, of which the following is a specification, reference being had 10 therein to the accompanying drawings.

This invention relates to those non-conducting hand-wheels which are usually attached to the stems or spindles of cocks and valves and other similar steam-fittings for the 15 purpose of preventing the engineer being burned in the act of opening and closing such appliances. These wheels are usually made of wood; but the steam heat frequently splits them and causes them to drop bodily off from 20 the supporting stems or spindles, thereby necessitating the use of a wrench or key to operate the cock. To overcome this serious difficulty I groove the wheel circumferentially and then insert a tie or binder within said 25 groove, the tie being usually of wire with its ends securely twisted together, this twisted portion being housed in a small pit or socket bored in the side of said wheel and communicating with said groove. After the wire has 30 been applied the unoccupied portion of the groove is filled with a suitable cement or other medium, which filling may be the same color as the hand-wheel, or it may be a different color, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a side elevation of my circumterentially grooved hand-wheel. Fig. 2 is a similar elevation, but showing said wheel mounted upon a valve stem or spindle and the binder secured within 40 the groove of said wheel. Fig. 3 is an enlarged vertical section through the edge of the wheel, the tie or binder being concealed by the "filling." Fig. 4 is an enlarged horizontal section through a portion of the wheel. Fig. 45 5 is a modification of my invention.

A represents a hand-wheel, composed of wood or other suitable non-conducting material or materials, and B is a circumferential groove in the periphery of the same.

C is a small pit or socket in the side of said wheel and communicating with the groove.

D represents a wire tie or other binder drawn tightly around the groove B, the ends of said tie being preferably twisted together, which l

twisted portion is housed within the pit or 55 socket C, as more clearly shown in Fig. 4. E in Fig. 3 represents a suitable filling for

concealing the tie. F represents the stem, spindle, knob, or shank of a cock, valve, lubricator, radiator, 60 or any other steam fitting or appliance to which hand-wheels are or can be attached, the wheel being secured to this member F by suitable fastenings.

From the above description it is apparent 65 that, if the wheel A should split in two by the action of the steam heat radiated from the cock or other fitting, these parts could not separate and drop off bodily from the spindle F, because the tie or binder D holds the sections of 70 the wheel together. Furthermore, this tie or binder does not in the least interfere with a secure grasp of the hand-wheel, and by using the filling E the binder and groove are completely concealed. As previously stated, this 75 filling may be the same color as the wood; but by making it a different color said filling will constitute an ornamental band or stripe extending around the periphery of the wheel.

The exact method of securing the ends of 80 the tie is immaterial, provided they are so fastened as not to project from the groove. In Fig. 5 the ends of the wire overlap a slight distance, and are then driven into the wheel as at d d', the overlapping portions being held 85 together by a staple, G, or other fastening, solder being sometimes used for this purpose.

I claim as my invention-1. For cocks, valves, and other steam-fittings, a non-conducting hand-wheel having a 90 circumferential groove with a tie or binder inserted therein and concealed by a filling applied to said groove, the ends of said tie being twisted together and housed within a pit or socket of said wheel, for the purpose de- 95

2. For cocks, valves, and other steam-fittings, a non-conducting hand-wheel having a circumferential groove with a tie or binder inserted therein, said tie being concealed by a 100 filling applied to the groove, for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK LUNKENHEIMER.

JAMES H. LAYMAN, EDMUND LUNKENHEIMER.